

naval officer with an impressive background of scientific training, and with an enviable record of achievement in the past war, which culminated in the award of the D.S.M.

I take great pleasure in presenting The Hydrographer, U. S. Navy, Rear Admiral Robert Ogden Glover.

ADMIRAL GLOVER: Mr. President, Members and Guests of the American Society of Photogrammetry; At no time in our history have Americans been as map conscious as we are today. It took the greatest conflict the world has ever known to awaken us to the need for maps and charts, not only of our own country, but also of the lands across the seas and of the oceans that link us with them.

We were not adequately prepared in this respect for World War I. Neither were we prepared for World War II. The question is—"Have we learned our lesson?" I know it is your hope that we never again lose track of the fact that accurate maps and charts are as necessary for war as ships, planes, munitions and other component parts of a fighting machine. Maps and charts are vital for planning, vital for striking and holding, and more important still, they are indispensable for victory. They are an integral part of war.

It is a tribute to you and to the other map makers of America that despite the fact that you practically had to start from scratch, you were able to produce the topographic maps, the nautical and aeronautical charts and the myriads of other special maps required by our armed forces in waging and in winning World War II.

I know, however, that you wish you had had more time to do a better job. Good maps and charts depend on good surveys. In the past we have devoted too little time and money to this important job.

Maps have a bad habit of getting old, obsolete and dangerous. For their maximum usefulness they must be kept up to date for the latest information. Like a piece of machinery, never oiled and in disrepair, they finally reach a point where their usefulness is gone. In other instances, it is like expecting a single cycle engine of 1900 vintage to take the place of the powerful motors required in a modern locomotive.

Many hydrographic and topographic surveys carried out decades ago have outlived their usefulness. Yet during the war we had to use these data, and are still so doing today. I could mention dozens of instances when we in the Navy had to depend on charts that were so deficient and inaccurate as to be dangerous. Particularly, when we had to prepare from these data bombardment charts for amphibious operations. This statement I know is true of the Navy, and I believe applicable to the Army and the Air Forces as well.

Now, the fault for this deficiency is not entirely ours, for we have to depend on other nations for map and chart information. Still, we, and I mean the charting and mapping agencies of the Government, have the responsibility for providing the three branches of the Armed Forces with whatever map information they require.

The word responsibility indicates among other things, that these agencies are morally or legally accountable for this essential tool of war. The first thing, therefore, that comes to mind is that if they are responsible they should have at their disposal the financial and physical means for carrying out their work at all times. The proper time to strengthen these agencies is not after the first shot is fired, but when the world is at peace.

We must remember, however, that financial and physical means add up to nothing, unless these agencies have adequate personnel available, trained in the

various phases of surveying and mapping. Dollars alone cannot provide this man power. Men cannot be trained over night. Their work is not a production line affair. It requires personnel of special qualifications, training and experience, for on the accuracy of their work may depend not only the lives of our fighting men but the success of a campaign. Their work can be a deciding factor between victory and defeat.

Surveying and mapping is a very complicated and highly technical profession. When projected over large land areas and over the oceans, it is a business that requires so much financial backing that as a general rule only governments have the means of prosecuting such work with success. On a smaller scale, it is the business of local government or civilian agencies. For example, when an engineering project is conceived, the first requisite for its efficient and economical prosecution is a detailed survey from which accurate maps may be prepared for planning and actual construction. This is true in city planning and development, highway and railroad construction, hydroelectric power development, harbor construction, soil and forest conservation or oil prospecting.

Maps are also required for weather forecasting, census studies, and other miscellaneous uses. However, the outstanding value of maps and charts is for transportation on land, at sea, and in the air. Transportation serves to bring the peoples of the world together and permits the interchange of goods and ideas to mutual advantage. Maps and charts, therefore, may be said to provide the foundation for human progress for without them we would all be floundering in the dark.

Realizing the vital value of this commodity in peace and in war, why is it that we have not progressed further along in this respect? Is it lack of understanding on the part of our people? Is it apathy on the part of our legislators? Is it lack of appreciation of their worth, or because the surveying and mapping profession has been too backwards in selling the value of its products? I personally believe it is a combination of the factors I have just mentioned. I further believe that both the public and the Congress are awakening and becoming more conscious of the need for better coverage not only of our country but of the entire world.

Air transportation has come of age. Faster and bigger planes require more accurate data than is now available for many areas throughout the world. The development of the natural resources of areas at home and abroad make it essential, if not mandatory, to carry out survey operations on a large scale. This not only includes the land but the sea as well. For the sea provides the accessibility needed for economical transportation of material in large quantities.

You of the American Society of Photogrammetry therefore, have a big responsibility for without doubt aerial photography and photogrammetric procedures offer the only solution to the mapping work that lies ahead of us. You are to be commended for the outstanding progress that America has made in photogrammetry. I attribute most of this progress to the work and inspiration of the members of your Society. However, we should not rest on our laurels. Much remains to be done in solving many problems still puzzling us; such as simplifying the establishment of control, improving photographic procedures, more accurate and faster compilation of the data, and finally the construction and reproduction of the final map.

You, who are contributing to the task of helping to build a better world through the wider application of photogrammetry, should not forget your responsibilities. To you, also, falls the task of campaigning vigorously for the continuance of surveying and mapping work. It is an inspiring task, for out of this work, you will be strengthening the United States of America.